

Research on the Socialization and Achievement of Greek Children and Youth: An International Perspective

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The four international studies analyzed in this study were based on Walberg's productivity model as a theoretical framework. Interconnections within the model were analyzed. The home environment was divided into socioeconomic status variables, one/two parent families, geographic location, language patterns in the home, and the four family processes: pressure, support, help, and press for intellectual development. (See Table 1).

The four studies utilized two frameworks: Walberg's educational productivity model and Campbell's differential socialization paradigm. Walberg (1984a, 1984b, 1986) linked nine factors that predicated positive changes in student cognitive and affective achievement. The student aptitude variables are (1) ability or prior achievement, (2) age, (3) motivation or self-concept; the instructional variables are (4) quantity of instruction, (5) quality of instruction; and the psychological variables are (6) home environment, (7) the classroom or school environment, (8) the peer group environment, and (9) the mass media.

Reynolds and Walberg (1990) found that the construct of home environment and prior ability exhibited the strongest relationship with academic achievement. Similar results were found by Bollin, Peters, Murphy and Berg (1987) with the study of cognitive devel-

opment and achievement of three- and four-year old children. International studies of family/home variables unearthed like findings (Campbell & Wu, 1994; Campbell & Ito, 1994; Keeses, 1972; Marjoribanks, 1981; Pitiyanuwat & Campbell, 1994).

The gender differences of the Greek children sampled were analyzed within Campbell's differential socialization paradigm. Campbell (1994) identifies an array of socio-psychological variables that have been identified as influencing gender differences. Campbell calls the combinations of socio-psychological variables used by socializing agents, socialization tunes. These tunes are different for boys and for girls. Combinations of these tunes, even with their small differences, add up over the years. Over a period of time they become sizable gender inequities. The socializing agents are not only the parents but also other members of the family, teachers and community members.

Campbell (1994) separates the socialization process into micro- and macro-inequities. The social agents impose micro-inequities, which are small gender differences, and macro-inequities which are the observable gender differences. Within ethnic groups different socialization tunes are identified for boys and for girls.

Instrument and Methods

The Inventory of Parental Influence (IPI) (Campbell, 1994) is a series of instruments designed to identify a family member's perceptions of the following family processes: parental pressure, parental psychological support, parental help, parental press for intellectual development (PID), and monitoring/time management. One version of the IPI isolated children's perceptions of these five family processes. Another version measures a father's perceptions, and a third version deals with a mother's perceptions of these five family processes.

In order to use the socioeconomic status data in the analyses, it was necessary to convert them into interval scales. For the Greek American studies the Nam-Powers Scale (see Nam & Powers, 1983) was used. It contains a scale for occupational status and a scale for parents' education. The Greek research team used the Seigel scale for conversion of data.

Interviews were conducted with 10% of the families of high

achieving students. This select group was interviewed because these families were believed to provide the most stimulating home environment. The interviews were created so that either the mother or father could respond. In some cases both parents participated under separate conditions. The researchers were especially interested in differences between the parents in sex-role areas. The interview guides included, questions on expectations, pressure, monitoring, and active participation. Interviews were tape recorded and took one hour to complete.

Academic self-concept data were derived from the Self-Concept Attributes Scale (SaaS) (Campbell, 1994). The items for each of seven different subscales identified math, science, English, social studies, general self-concepts, and effort attribution. The alpha reliability coefficients of these scales range from $r=.92$ to $r=.80$.

The demographic variables used to describe families included: gender, ethnicity, family structure (one- and two-parent families), educational level attained by mother and father, immigration status of each member of the family (country of birth), occupation of mother and father, and some measures of the students' prior academic ability. Levels of parents' education and parents' occupations were combined to form the factor of socioeconomic status (SES).

Each scale underwent a translation process. Two translators were used in the United States, and two more translators were used in Greece. Within each country one translator was responsible for a forward translation (English to Greek), and the other was assigned the task of the back translation (Greek to English). Each of the translators was born and educated in Greece but also had several years of advanced training in the U.S. The translators were required to have professional technical training in both countries. After both sets of translations were completed, the different versions were assembled and synthesized by the team responsible for the testing.

Statistical Methods

The gender differences between the boys and girls were analyzed by calculating effect sizes and tests. The effect sizes were tabulated according to a formula derived by Hedges (1986). The data were analyzed using hierarchical regression analyses and partial least squares path analysis (PLSPATH) as developed by Sellin

(1983). Sellin (1986; 1989) recommends standardizing the data before entry. This PLSPATH program included Jackknife procedures which randomly selected one case at a time and re-estimated the model parameters on the remaining cases. The procedure produced Jackknife path coefficients (direct and indirect effects), Jackknife standard errors, and R^2 values.

Variables entered into the path analysis must be arranged in a causal model (Davis, 1987). The SES factor, residential setting, and family structure variables were prior variables; academic self-concept, language achievement, report card grades, effort attribution, aspirations, and attitudes toward school were intervening variables; and achievement was the dependent variable. Separate path analyses for boys and girls were used for math, science, English, and social studies achievement.

Results

In all four studies language achievement or grade point average were the best predictor of achievement. Academic self-concepts were found to have significant positive indirect effects on achievement through prior ability. Self-concepts played an important role for the male sample. The upper elementary grade male students' report card grade and math achievement was effected by an increase in math self-concepts. The high school male students were effected more by science self-concepts for science achievement and general academic self-concept as an impetus for educational aspirations. The females from the Greek American samples were found to have a significant direct connection between math self-concept and math, and language achievement.

High levels of perceived parental psychological support and low levels of pressure bolstered self-concept. The Greek upper elementary level high ability male students received high levels of support which in turn translated into lower math achievement. This proved to be dysfunctional for them, whereas the females used this high support to their benefit. This finding was also true for the Greek American females.

The family process pressure is detrimental to students' achievement when provided in an abundance. High levels of perceived parental help was found to be nonproductive for the younger Greek

females. Pressure for intellectual resources plays an important role in young female achievement. The greater the exposure to reading material the greater the effect it has on math achievement, language achievement, and report card grades. This factor as well as support were especially influential in the results of the females residing in urban and semi-urban Greek areas, and males living in semi-urban and rural Greek areas. More parental pressure, monitoring, and help are given to males inhabiting rural Greek areas. An extensive amount of pressure proves to be dysfunctional for this male population.

The Greek American high school females achievement was found to be indirectly effected by educational aspirations. The males are more concerned with effort and attitude towards school as an influence on achievement.

SES was an important factor in with three of our sample studies. It was not an important factor for the Greek 5th and 6th grade students. For the Cypriot and Greek American high school male and females students, it exhibited indirect effects on educational aspirations, and math and science achievement. It influenced the intervening factors by significant negative direct effects on pressure and positive direct effects on support. For the Greek American males there was an indirect connection between SES and English, and social studies achievement. A strong positive connection was also evidenced in the Greek American 4th-7th grade students. SES showed a positive link with two parent families, the family process help, and language achievement. For females in this sample it was found that SES and two parent families was strongly connected to the family processes.

Qualitative Findings

Interviews conducted with Greek parents confirmed the findings regarding pressure. The indicated that more pressure is applied to sons than daughters. Children need discipline accompanied by encouragement, praise, love, and understanding. They felt that effort was an important ingredient for school success. The parents wanted their children to work hard at home and in school as well as taking the initiative and responsibility for schoolwork.

In contrast, the children of these parents felt that pressure was

not as influential as parents' advice and counseling for fostering academic success. The children indicated that their mothers applied more pressure than their fathers.

Interviews with the Greek American parents revealed similar findings similar to those of their cohorts in Greece. Extensive pressure was dysfunctional for these students. Yet, discipline, being strict, and pressure are used as motivational devices. The sons received more pressure with schoolwork than daughters. The males were geared for professional occupation whereas the females were headed for a teaching career. The daughters receive more social pressure to be good girls and to eventually get married. These findings reinforce the existing sexual stereotype roles.

The parental pressure of help was administered equally between the sexes. Specific rules for doing homework were established. Rules for watching television were imposed to avoid an overabundance of viewing.

Homes of high achieving children, in both samples, were found to have an abundance of reference books, encyclopedias, atlases, and other reading material. This high level of PID was associated with higher math achievement for males and higher reading achievement for females.

In viewing all the data, it is evident that the Greek community socializes its children along traditional lines.

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Table 1
Informational Data Used in This Analysis

Authors	Year and Title	Sample	Independent Variables	Dependent Variables
Koutsoulis, M. & Campbell, J. R.	1993 Differential Socialization in a Multicultural Setting Effects Academic Achievement	127 Males 169 Females Greek American High School Students Queens, New York	SES, Family Structure, Fam- ily Processes, Prior Ability, Effort, Aspiration, Attitude Towards School Academic Self-Concepts	Math Achievement Science Achievement English Social Studies Achievement
Campbell, J. R.	Ethnic enclaves—cul-de-sacs or conduits: Differential aspira- tions in Greek American, Cau- casian American, Latino, and Asian American neighborhoods in New York City	230 Males 206 Females Greek American 4-7 Grade Students from Greek Orthodox Parochial Schools New York City	SES, Family Structure, Fam- ily Processes, Math Self-Con- cepts, Language Achieve- ment, Report Card Grades	Math Achievement
Flouris, G., Calogiannakis- Hourdakis, P., Spiridakis, J., & Campbell, J. R.	1994 Tradition and Socioeconomic Status are Greek Keys to Aca- demic Success.	356 Males 397 Females Greek 5 & 6 grade Students from Urban, Semi-urban, and Rural Areas in Greece	SES, Family Structure, Family Processes, Academic Self-Concepts, Language Achievement	Math Achievement
Koutsoulis, M.	1995 Family Processes Affect Stu- dents' Motivation and Achieve- ment in Cypriot High Schools	292 Males 445 Females Greek High School Stu- dents from Urban and Ru- ral Areas in Cyprus	SES, Family Structure, Family Size, Setting, Family Processes, Attitude Toward School, Parents' Expectations, Prior Ability	Math Achievement Science Achievement Educational Aspirations Career Expectations